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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,214

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Tsuyoshi Nakamura

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EXAMINER

GREENHUT, CHARLES N

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,214

Applicant(s)

NAKAMURA ET AL.

Examiner

Charles N. Greenhut

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ✓ 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ✓ 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

I. Specification

1. The meaning of the phrase “mechanisms are moved slide on abutment slopes” in line 7-8 of the abstract is unclear.

II. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(1) The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 2-3 and 5-8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 1.1. Claim 2 is indefinite because it is unclear what is meant by the term “a surface plate.”

- 1.2. Claim 3 recites the tem, “the support portions” in line 3. There is insufficient antecedent basis for this term.

- 1.3. Regarding claims 5 and 6 the phrases “hydraulic-type” or “electric-type” render the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by “type”), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

- 1.4. With respect to claim 7, it is unclear what is meant by the term, “suppress means” in line 3.

1.5. With respect to claim 8, it is unclear what is meant by the term “involving” in line 3.

III. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-3, and 8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN (US 6,120,609 A) in view of POLLOCK (US 4,726,689 A).

1.1. With respect to claim 1, SELYUTIN discloses a casing (38), table (22), connecting portion (32), moving portion (Fig. 10-15), base (34), adjusting support (239) and seal (Col. 1 Li. 64-67). SELYUTIN fails to disclose a differential pumping seal. POLLOCK teaches a differential pumping seal is known in the art (Col 1. Li. 16 et seq.). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the differential pumping seal of POLLOCK in order to provide low friction, low particulates, low noise, and high stiffness guidance to a substrate support shaft while maintaining a high differential pressure between the evacuated process chamber and the ambient environment which surrounds it.

1.2. With respect to claim 2, SELYUTIN additionally discloses the casing and base placed on a surface plate (230).

1.3. With respect to claim 3, SELYUTIN additionally discloses supporting the base at three points or more (Fig. 19).

1.4. With respect to claim 8, SELYUTIN additionally discloses a seal plate (110), O-ring (52) and bellows (48).

2. Claim(s) 4, and 6-7 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN in view of POLLOCK and further in view of KOBAYASHI (US 5,073,912 A).

2.1. With respect to claim 4, SELYUTIN teaches only one adjusting portion. KOBAYASHI teaches a fine (3) and coarse (2) adjusting portion. It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the fine and coarse adjusting portions of KOBAYASHI in order to allow both efficient and accurate positional adjustments.

2.2. With respect to claim 6, SELYUTIN does not specify the type of drive source used. Electric drives are well known in the art, for example, KOBAYASHI teaches an electric drive (603). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the electric drive KOBAYASHI in order to actuate the adjusting mechanisms.

2.3. With respect to claim 7, SELYUTIN additionally discloses a suppress means (240).

3. Claim(s) 5 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN in view of POLLOCK and further in view of MCDONALD (US 2,908,472 A)

3.1. With respect to claim 5, SELYUTIN does not specify the type of drive source used. Hydraulic drives are well known in the art, for example, MCDONALD teaches a hydraulic drive source (Fig. 1). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the hydraulic drive of MCDONALD in order to actuate the adjusting mechanisms.

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IV. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG



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